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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,361	08/09/2001	Jan Olsen	PATRADE	2957
7590 08/18/2004				
James C Wray 1493 Chain Bridge Road Suite 300 McLean, VA 22101			EXAMINER MANOHARAN, VIRGINIA	
			ART UNIT	PAPER NUMBER
			1764	

DATE MAILED: 08/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/889,361	<b>Applicant(s)</b> OLSEN, JAN	
	<b>Examiner</b> Virginia Manoharan	<b>Art Unit</b> 1764	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 August 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

The abstract of the disclosure is objected to because of the inclusion of legal phraseology often used in patent claims such as: "comprise" recited in lines 6 and 11; and "consist of" recited at the second line from the bottom. Correction is required. See MPEP § 608.01(b).

Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance. [Note page 5, lines 12-15 of the specification indicating them to be a "known technology"].

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors, e.g., typographical, grammar, idiomatic, syntax and etc. Applicants' cooperations are requested in correcting any errors of which applicants may become aware in the specification.

Claims 1-8 are objected to because of the following informalities:

(a) The term "characterized" is not a recitation of positive manipulative method step nor a recitation of positive structural elements of an apparatus.

(b) There are no proper antecedent basis for supports in the claims for the following recitations:

(1) " the acid/base reactions" in claims 1 & 4 as the reactions are not recited initially in the base claim.

(2) " The column elements" in claim 4.

(3) The claimed "compounds which in liquid form are led from the column and back to the boiler..." in claim 6 as the above is not initially recited in the base claim.

(c) The term "suitable" in claim 8, line 1 is a relative term and should be deleted. Appropriate correction is required.

Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(a) The claims or at least part of the claims do not recite positive, explicit, physical process steps, but rather recite passive terms which make the actual steps vague and indefinite. For examples only: by evaporation of the waste water, by heating..." recited e.g. in claim 1.

(b) It is unclear what is meant by the underlined phrases in the claimed "...steam is flowing...in order in a liquid form..." .

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(c) Claim 8 does not set forth any further steps to further limit the method/process of claim 1. Reciting claim 8 in independent form obviates this rejection.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over WO 9822394 or Bastholm et al (5,928,412).

WO '394 is deemed to anticipate or renders obvious the "... Process for cleaning of biological waste water which contains more mobile compounds and less mobile compounds compared to the mobility of water, said compounds being present as weak acids and weak bases, by evaporation of the waste water, by heating the waste water in a boiler, where the generated steam is cleaned for unwanted gaseous compounds, where the steam is taken from the boiling step via a compression step to a heat exchanging step, where the water is condensed, characterized in that the steam from the boiler is conducted to a column, in which the steam is flowing countercurrently to a fraction of the condensed water in order in a liquid form to remove the less mobile

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compounds including a part of the more mobile compounds and the less mobile compounds which are taking in the acid/base reactions, in that the steam fraction containing a remaining part of the more mobile compounds are led from the column via the compression step to the heat exchanging step, where the main part of the more mobile compounds are concentrated and drained off together with a remaining fraction of the steam, and in that the condensed and cleaned waste water is drained off to recipient..." as claimed in claim 1. The WO '394 is deemed also to anticipates or renders obvious the claimed "Apparatus.....which comprises a boiler, a column, a compressor, and a heat exchanger, where the compressor is placed between the column and heat exchanger, and where a pump is placed between the boiler and heat exchanger for transference of the content of the boiler to the heat exchanger for heat exchanging of the steam from the column and characterized in that the column is connected with a steam tapping from the boiler." as further claimed in claim 8. Note e.g., col.8, lines 5-33 through cols.9-11; and col.7, lines 29-32 through col.8, lines 1-4. Note further the abstract Bastholm which teaches similar method and apparatus as above.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(a) WO '203 discloses a method and apparatus for treating liquids with compressor that leads vapor from the evaporator to condenser.

(b) Hashimoto et al discloses a process and apparatus for separation of volatile components.

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(c) Bourdel discloses a process and apparatus of extracting solid residues from aqueous slurry.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Virginia Manoharan whose telephone number is (571) 272-1450.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola, can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Manoharan/tgd

August 10, 2004

  
VIRGINIA MANOHARAN  
PRIMARY EXAMINER  
ART UNIT 1231764  
8/10/04